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IBM Technical Disclosure Bulletins

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DATE: Wednesday, April 06, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR			
L5	l2 and L4	79	L5
L4	(transformed or transgenic) adj rice	567	L4
L3	(transformed or transgenic) adj plants	14877	L3
L2	foreign adj (protein or polypeptides)	11321	L2
DB=USPT; PLUR=YES; OP=OR			

L20	l19 and l17 and L11	8 L20
L19	optimized adj codon	438 L19
L18	l11 and L17	348 L18
L17	(transgenic adj plants) or (transformed adj plants)	14877 L17
L16	l11 and l14	9384 L16
L15	l11 and l12 and L14	5348 L15
L14	(transformed or transgenic) plant	860870 L14
L13	l11 and L12	6669 L13
L12	improved	2946810 L12
L11	GM-CSF	

L35	l11 and L34	4 L35
L34	Tackaberry.in.	44 L34
L33	l27	38 L33
L32	L31	2 L32
L31	l26	2 L31
L30	l25	6 L30
L29	l24	2 L29
	DB=PGPB; PLUR=YES; OP=OR	
L28	l11 and L27	2 L28
L27	Ganz.in.	38 L27
L26	Dudani.in.	2 L26
L25	Sardana.in.	6 L25
L24	Altosaar.in.	2 L24
L23	2005050602	0 L23
	DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR	
L22	Qiu adj Jian-Tai	7 L22
L21	Qui adj Jian-Tai	0 L21
L20	l19 and l17 and L11	8 L20
L19	optimized adj codon	438 L19
L18	l11 and L17	348 L18
L17	(transgenic adj plants) or (transformed adj plants)	14877 L17
L16	l11 and l14	9384 L16
L15	l11 and l12 and L14	5348 L15
L14	(transformed or transgenic) plant	860870 L14
L13	l11 and L12	6669 L13
L12	improved	2946810 L12
L11	GM-CSF	12921 L11

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 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  FEB 25   CA/CAPLUS - Russian Agency for Patents and Trademarks
                   (ROSPATENT) added to list of core patent offices covered
 NEWS  4  FEB 28   PATDPAFULL - New display fields provide for legal status
                   data from INPADOC
 NEWS  5  FEB 28   BABS - Current-awareness alerts (SDIs) available
 NEWS  6  FEB 28   MEDLINE/LMEDLINE reloaded
 NEWS  7  MAR 02   GBFULL: New full-text patent database on STN
 NEWS  8  MAR 03   REGISTRY/ZREGISTRY - Sequence annotations enhanced
 NEWS  9  MAR 03   MEDLINE file segment of TOXCENTER reloaded
 NEWS  10 MAR 22   KOREAPAT now updated monthly; patent information enhanced
 NEWS  11 MAR 22   Original IDE display format returns to REGISTRY/ZREGISTRY
 NEWS  12 MAR 22   PATDPASPC - New patent database available
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                   fields
 NEWS  15 APR 04   EMBASE - Database reloaded and enhanced

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               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

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FILE 'HOME' ENTERED AT 09:08:33 ON 06 APR 2005

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                                                 ENTRY    SESSION
FULL ESTIMATED COST                               0.21       0.21

FILE 'AGRICOLA' ENTERED AT 09:08:52 ON 06 APR 2005
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FILE 'BIOSIS' ENTERED AT 09:08:52 ON 06 APR 2005
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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'CABA' ENTERED AT 09:08:52 ON 06 APR 2005
COPYRIGHT (C) 2005 CAB INTERNATIONAL (CABI)

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=> set plurals on perm
SET COMMAND COMPLETED

=> set abbr on perm
SET COMMAND COMPLETED

=> s foreign (w) (protein or polypeptides)
L1        5041 FOREIGN (W) (PROTEIN OR POLYPEPTIDES)

=> s GM-CSF
L2       35233 GM-CSF

=> s cereal
L3      302874 CEREAL

=> s l2 and l3
L4           2 L2 AND L3

=> d l4 1 ibib

L4   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2005:185497  CAPLUS
DOCUMENT NUMBER:         142:275034
TITLE:                   Methods for synthesis of recombinant human
                         granulocyte-macrophage colony stimulating factor in
                         transgenic cereal crops
INVENTOR(S):             Altosaar, Illimar; Sardana, Ravinder; Dudani, Anil;
                         Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S):      Can.
SOURCE:                  U.S. Pat. Appl. Publ., 23 pp.
                         CODEN: USXXCO
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     --------------      ----   --------    --------------------     --------
     US 2005050602        A1    20050303    US 2003-723083           20031126
PRIORITY APPLN. INFO.:                      CA 2002-2410702      A   20021126


=> d l4 2 ibib

L4   ANSWER 2 OF 2  CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER:          95:197929  CABA
DOCUMENT NUMBER:           19951612170
TITLE:                     Harvesting blood proteins from grain
AUTHOR:                    Robinson, A.
```

SOURCE: Canadian Medical Association Journal, (1995) Vol. 153, No. 4, pp. 427-429. 6 ref.
ISSN: 0820-3946
DOCUMENT TYPE: Journal
LANGUAGE: English
SUMMARY LANGUAGE: French
ENTRY DATE: Entered STN: 19951115
Last Updated on STN: 19951115

=> d l4 2 abs

L4 ANSWER 2 OF 2 CABA COPYRIGHT 2005 CABI on STN
AB An account is given of the work of a multidisciplinary team of researchers at the University of Ottawa, Canada, which has resulted in the expression of a human blood protein, granulocyte-macrophage colony stimulating factor (**GM-CSF**), in tobacco seeds as part of a series of experiments whose ultimate goal is to express human blood proteins in transgenic **cereal** crops. The **GM-CSF** gene was expressed during seed development, and presence of the protein was confirmed by biochemical and immunological analyses. It is estimated that only 120 plants would be needed to satisfy Canada's annual need for this protein. Work on the oral uptake of these proteins and their expression in **cereal** crops is underway.

=> s rice
L5 304052 RICE

=> s l2 and l5
L6 8 L2 AND L5

=> d l6 1 ibib

L6 ANSWER 1 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:279638 BIOSIS
DOCUMENT NUMBER: PREV200300279638
TITLE: Immune enhancing effect by orally-administered mixture of Saccharomyces cerevisiae and fermented **rice** bran.
AUTHOR(S): Koh, Jong Ho; Kim, Jin Man; Suh, Hyung Joo [Reprint Author]
CORPORATE SOURCE: Obesity Research Center, Dongduk Women's University, Seoul, 136-174, South Korea
suh1960@unitel.co.kr
SOURCE: Journal of Microbiology and Biotechnology, (April 2003) Vol. 13, No. 2, pp. 196-201. print.
ISSN: 1017-7825.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Jun 2003
Last Updated on STN: 11 Jun 2003

=> d l6 2 ibib

L6 ANSWER 2 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:23292 BIOSIS
DOCUMENT NUMBER: PREV200300023292
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide.
AUTHOR(S): Sardana, Ravinder K.; Alli, Zaman; Dudani, Anil; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; Altosaar, Illimar [Reprint Author]

CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, ON, K1N 6N5, Canada
altosaar@uottawa.ca
SOURCE: Transgenic Research, (October 2002) Vol. 11, No. 5, pp. 521-531. print.
ISSN: 0962-8819 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Jan 2003
Last Updated on STN: 1 Jan 2003

=> d l6 3 ibib

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:185497 CAPLUS
DOCUMENT NUMBER: 142:275034
TITLE: Methods for synthesis of recombinant human granulocyte-macrophage colony stimulating factor in transgenic cereal crops
INVENTOR(S): Altosaar, Illimar; Sardana, Ravinder; Dudani, Anil; Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005050602	A1	20050303	US 2003-723083		20031126
PRIORITY APPLN. INFO.:			CA 2002-2410702	A	20021126

=> d 16 4 ibib

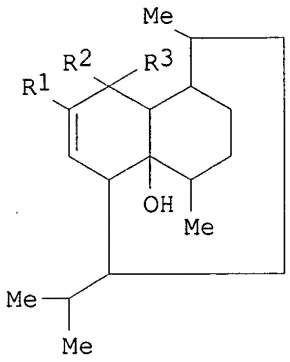
L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:752746 CAPLUS
DOCUMENT NUMBER: 139:275813
TITLE: Vinigrol derivatives, microbial manufacture of them, and **GM-CSF**-like pharmaceutical compositions containing them
INVENTOR(S): Yutsudo, Takashi; Koizumi, Kenzo; Kagawa, Shimizu
PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003267930	A2	20030925	JP 2002-69685	20020314
PRIORITY APPLN. INFO.:			JP 2002-69685	20020314
OTHER SOURCE(S):	MARPAT 139:275813			

=> d 16 4 abs

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

GI



I

AB Claimed are **GM-CSF**-like pharmaceutical compns., immunostimulants, prophylactic or therapeutic agents for neutropenia, antitumor agents the derivs. I [R1 = CHO, CH2R4 (R4 = OH, protected hydroxy); one of R2 and R3 = H and the other = H, OH, protected hydroxy; R2R3 may represents :O], their optical isomers, their pharmaceutically-acceptable salts, or their hydrates. I (R1 = CHO, CH2R4; R2 = R3 = H) and I (R1 = CH2OAc, R2 = H, R3 = OH) are manufactured by culturing Bloxamia. Bloxamia cremea RF-19445 (P-18755) was cultured on a medium containing brown **rice**, dried okara, glucose, yeast extract, and H2O at 23° for 14 days to give II and III. II was also prepared form vinigrol. II inhibited growth of human erythroleukemia K562 cells at IC50 0.59 μg/mL. Pharmaceutical formulations of II were also given.

=> d 16 5 ibib

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:730085 CAPLUS
DOCUMENT NUMBER: 138:164311
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR(S): Sardana, Ravinder K.; Alli, Zaman; Dudani, Anil; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; Altosaar, Illimar
CORPORATE SOURCE: Faculty of Medicine, Microbiology and Immunology, Department of Biochemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Transgenic Research (2002), 11(5), 521-531
CODEN: TRSEES; ISSN: 0962-8819
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 16 6 ibib

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:442749 CAPLUS
DOCUMENT NUMBER: 119:42749
TITLE: Plant virus expression vectors and their use in manufacture of products with plants
INVENTOR(S): Donson, Jon; Dawson, William O.; Grantham, George L.;

Turpen, Thomas H.; Turpen, Ann Myers; Garger, Stephen J.; Grill, Laurence K.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9303161	A1	19930218	WO 1992-US6359	19920731
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD, US				
AU 9333511	A1	19930302	AU 1993-33511	19920731
AU 683412	B2	19971113		
EP 596979	A1	19940518	EP 1992-916441	19920731
EP 596979	B1	20020130		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 07503361	T2	19950413	JP 1992-511611	19920731
AT 212671	E	20020215	AT 1992-916441	19920731
ES 2171398	T3	20020916	ES 1992-916441	19920731
AU 9918610	A1	19990506	AU 1999-18610	19990305
AU 741443	B2	20011129		
JP 2001054394	A2	20010227	JP 2000-212070	20000712
JP 3545683	B2	20040721		
JP 2002171976	A2	20020618	JP 2001-313207	20011010
JP 3316209	B2	20020819		

PRIORITY APPLN. INFO.:

US 1990-600244	A2	19901022
US 1991-641617	A2	19910116
US 1991-737899	A2	19910726
US 1991-739143	A2	19910801
JP 1992-511611	A3	19920731
WO 1992-US6359	A	19920731
AU 1995-11734	A3	19941108

=> d 16 6 abs

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
AB Plant virus expression vectors capable of systemic infection of a host plant and of expressing an heterologous gene from a viral promoter are used for the manufacture of heterologous protein in plants. The promoter region used for the heterologous gene is incapable of recombination with the plant virus subgenomic promoters. Plasmid pBGC152 containing tobacco mosaic virus (TMV) cDNA including an α-trichosanthin gene under control of the TMV coat protein subgenomic promoter replacing the TMV coat protein gene, and the odontoglossum ringspot virus coat protein gene with its associated subgenomic promoter, was prepared TMV vector RNA produced from this plasmid by in vitro transcription from an SP6 promoter adjacent to the construct was used to infect Nicotiana benthamiana. Systemic infection of the plant was observed, and, at 14 days post-inoculation, α-trichosanthin accumulated in the upper leaves to levels of at least 2% of the total soluble protein. The α-trichosanthin was isolated, purified, and shown to be biol. active.

=> d 16 7 ibib

L6 ANSWER 7 OF 8 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2003:19386 CABA
DOCUMENT NUMBER: 20023171035
TITLE: Biological activity of human granulocyte-macrophage

colony stimulating factor is maintained in a fusion with seed glutelin peptide

AUTHOR: Sardana, R. K.; Alli, Z.; Dudani, A.; Tackaberry, E.; Panahi, M.; Narayanan, M.; Ganz, P.; Altosaar, I.

CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, Ontario, K1N 6N5, Canada. altosaar@uottawa.ca

SOURCE: Transgenic Research, (2002) Vol. 11, No. 5, pp. 521-531. many ref.
Publisher: Kluwer Academic Publishers. Dordrecht
ISSN: 0962-8819

PUB. COUNTRY: Netherlands Antilles
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20030214
Last Updated on STN: 20030214

=> d l6 8 ibib

L6 ANSWER 8 OF 8 on STN EMBASE

ACCESSION NUMBER: 2003189926 EMBASE

TITLE: Immune enhancing effect by orally-administered mixture of Saccharomyces cerevisiae and fermented **rice** bran.

AUTHOR: Koh J.H.; Kim J.M.; Suh H.J.

CORPORATE SOURCE: H.J. Suh, Department of Food and Nutrition, College of Health Sciences, Korea University, Seoul 136-703, Korea, Republic of. suh1960@unitel.co.kr

SOURCE: Journal of Microbiology and Biotechnology, (2003) Vol. 13, No. 2, pp. 196-201.
Refs: 23
ISSN: 1017-7825 CODEN: JOMBES

COUNTRY: Korea, Republic of
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 20030522
Last Updated on STN: 20030522

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=> s cereal
L7      302874 CEREAL

=> s GM-CSF
L8       35233 GM-CSF

=> s l7 and l8
L9           2 L7 AND L8

=> d l9 1 ibib

L9   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:185497  CAPLUS
DOCUMENT NUMBER:          142:275034
TITLE:                    Methods for synthesis of recombinant human
                          granulocyte-macrophage colony stimulating factor in
                          transgenic cereal crops
INVENTOR(S):              Altosaar, Illimar; Sardana, Ravinder; Dudani, Anil;
                          Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S):       Can.
SOURCE:                   U.S. Pat. Appl. Publ., 23 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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     US 2005050602         A1    20050303    US 2003-723083           20031126
PRIORITY APPLN. INFO.:                       CA 2002-2410702      A   20021126


=> d l9 3 ibib
      2 ANSWERS ARE AVAILABLE.  SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
ENTER ANSWER NUMBER OR RANGE (1):2

L9   ANSWER 2 OF 2  CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER:          95:197929  CABA
DOCUMENT NUMBER:           19951612170
TITLE:                     Harvesting blood proteins from grain
AUTHOR:                    Robinson, A.
SOURCE:                    Canadian Medical Association Journal, (1995) Vol.
                           153, No. 4, pp. 427-429. 6 ref.
                           ISSN: 0820-3946
DOCUMENT TYPE:             Journal
LANGUAGE:                  English
SUMMARY LANGUAGE:          French
ENTRY DATE:                Entered STN: 19951115
                           Last Updated on STN: 19951115
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=> s Altosaar, I?/au
L16        334 ALTOSAAR, I?/AU

=> s GM-CSF
L17      35233 GM-CSF

=> s l16 and l17
L18          7 L16 AND L17

=> d l18 1 ibib

L18  ANSWER 1 OF 7  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
ACCESSION NUMBER:   2003:23292  BIOSIS
DOCUMENT NUMBER:    PREV200300023292
TITLE:              Biological activity of human granulocyte-macrophage colony
                    stimulating factor is maintained in a fusion with seed
                    glutelin peptide.
AUTHOR(S):          Sardana, Ravinder K.; Alli, Zaman; Dudani, Anil;
                    Tackaberry, Eilleen; Panahi, Mitra; Narayanan,
                    Muthukrishnan; Ganz, Peter; Altosaar, Illimar
                    [Reprint Author]
CORPORATE SOURCE:   Department of Biochemistry, Microbiology and Immunology,
                    Faculty of Medicine, University of Ottawa, 40 Marie Curie,
                    Ottawa, ON, K1N 6N5, Canada
                    altosaar@uottawa.ca
SOURCE:             Transgenic Research, (October 2002) Vol. 11, No. 5, pp.
                    521-531. print.
                    ISSN: 0962-8819 (ISSN print).
DOCUMENT TYPE:      Article
LANGUAGE:           English
ENTRY DATE:         Entered STN: 1 Jan 2003
                    Last Updated on STN: 1 Jan 2003


=> d l18 2 ibib

L18  ANSWER 2 OF 7  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
ACCESSION NUMBER:   1998:236789  BIOSIS
DOCUMENT NUMBER:    PREV199800236789
TITLE:              Synthesis of recombinant human cytokine GM-
                    CSF in the seeds of transgenic tobacco plants.
AUTHOR(S):          Sardana, Ravinder K.; Ganz, Peter R.; Dudani, Anil;
                    Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar,
                    Illimar
CORPORATE SOURCE:   Dep. Biochem., Univ. Ottawa, Ottawa, ON, Canada
SOURCE:             Cunningham, C. [Editor]; Porter, A. J. R. [Editor]. (1998)
                    pp. 77-87. Methods in Biotechnology; Recombinant proteins
                    form plants: Production and isolation of clinically useful
                    compounds. print.
                    Publisher: Humana Press Inc., Suite 808, 999 Riverview
                    Drive, Totowa, New Jersey 07512, USA. Series: Methods in
                    Biotechnology.
                    ISBN: 0-89603-390-2.
DOCUMENT TYPE:      Book
                    Book; (Book Chapter)
LANGUAGE:           English
ENTRY DATE:         Entered STN: 4 Jun 1998
                    Last Updated on STN: 4 Jun 1998


=> d l18 3 ibib

L18  ANSWER 3 OF 7  CAPLUS  COPYRIGHT 2005 ACS on STN
```

ACCESSION NUMBER: 2005:185497 CAPLUS
DOCUMENT NUMBER: 142:275034
TITLE: Methods for synthesis of recombinant human granulocyte-macrophage colony stimulating factor in transgenic cereal crops
INVENTOR(S): **Altosaar, Illimar**; Sardana, Ravinder; Dudani, Anil; Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005050602	A1	20050303	US 2003-723083		20031126
PRIORITY APPLN. INFO.:			CA 2002-2410702	A	20021126

=> d l18 4 ibib

L18 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:730085 CAPLUS
DOCUMENT NUMBER: 138:164311
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR(S): Sardana, Ravinder K.; Alli, Zaman; Dudani, Anil; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; **Altosaar, Illimar**
CORPORATE SOURCE: Faculty of Medicine, Microbiology and Immunology, Department of Biochemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Transgenic Research (2002), 11(5), 521-531
CODEN: TRSEES; ISSN: 0962-8819
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l18 5 ibib

L18 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:218988 CAPLUS
DOCUMENT NUMBER: 128:256401
TITLE: Synthesis of recombinant human cytosine **GM-CSF** in the seeds of transgenic tobacco plants
AUTHOR(S): Sardana, Ravinder K.; Ganz, Peter R.; Dudani, Anil; Tackaberry, Eilleen S.; Cheng, Xiongying; **Altosaar, Illimar**
CORPORATE SOURCE: Department of Biochemistry, University of Ottawa, ON, Can.
SOURCE: Methods in Biotechnology (1998), 3(Recombinant Proteins from Plants), 77-87
CODEN: MEBIFQ
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l18 6 ibib

L18 ANSWER 6 OF 7 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2003:19386 CABA
DOCUMENT NUMBER: 20023171035
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR: Sardana, R. K.; Alli, Z.; Dudani, A.; Tackaberry, E.; Panahi, M.; Narayanan, M.; Ganz, P.; **Altosaar, I.**
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, Ontario, K1N 6N5, Canada. altosaar@uottawa.ca
SOURCE: Transgenic Research, (2002) Vol. 11, No. 5, pp. 521-531. many ref.
Publisher: Kluwer Academic Publishers. Dordrecht
ISSN: 0962-8819
PUB. COUNTRY: Netherlands Antilles
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20030214
Last Updated on STN: 20030214

=> d l18 7 ibib

L18 ANSWER 7 OF 7 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in transgenic plants: the cytokine **GM-CSF** as a model protein
AUTHOR: Ganz, P. R.; Dudani, A. K.; Tackaberry, E. S.; Sardana, R.; Sauder, C.; Cheng XiongYing; **Altosaar, I.**; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
CORPORATE SOURCE: Drugs Directorate, Health Canada, Ottawa, Canada.
SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
Publisher: John Wiley & Sons Ltd. Chichester
ISBN: 0-471-96444-1
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> d l18 8 ibib
7 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
ENTER ANSWER NUMBER OR RANGE (1):7

L18 ANSWER 7 OF 7 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in transgenic plants: the cytokine **GM-CSF** as a model protein

AUTHOR: Ganz, P. R.; Dudani, A. K.; Tackaberry, E. S.; Sardana, R.; Sauder, C.; Cheng XiongYing; **Altosaar, I.**; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
CORPORATE SOURCE: Drugs Directorate, Health Canada, Ottawa, Canada.
SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
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ISBN: 0-471-96444-1
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> s Sardana, R?/au
L19 106 SARDANA, R?/AU

=> s GM-CSF
L20 35233 GM-CSF

=> s l19 and l20
L21 7 L19 AND L20

=> d l21 1 ibib

L21 ANSWER 1 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:23292 BIOSIS
DOCUMENT NUMBER: PREV200300023292
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide.
AUTHOR(S): **Sardana, Ravinder K.**; Alli, Zaman; Dudani, Anil; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; Altosaar, Illimar [Reprint Author]
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, ON, K1N 6N5, Canada
altosaar@uottawa.ca
SOURCE: Transgenic Research, (October 2002) Vol. 11, No. 5, pp. 521-531. print.
ISSN: 0962-8819 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Jan 2003
Last Updated on STN: 1 Jan 2003

=> d l21 2 ibib

L21 ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1998:236789 BIOSIS
DOCUMENT NUMBER: PREV199800236789
TITLE: Synthesis of recombinant human cytokine **GM-CSF** in the seeds of transgenic tobacco plants.
AUTHOR(S): **Sardana, Ravinder K.**; Ganz, Peter R.; Dudani, Anil; Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Dep. Biochem., Univ. Ottawa, Ottawa, ON, Canada
SOURCE: Cunningham, C. [Editor]; Porter, A. J. R. [Editor]. (1998) pp. 77-87. Methods in Biotechnology; Recombinant proteins

form plants: Production and isolation of clinically useful compounds. print.
Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA. Series: Methods in Biotechnology.
ISBN: 0-89603-390-2.
DOCUMENT TYPE: Book
Book; (Book Chapter)
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Jun 1998
Last Updated on STN: 4 Jun 1998

=> d l21 3 ibib

L21 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:185497 CAPLUS
DOCUMENT NUMBER: 142:275034
TITLE: Methods for synthesis of recombinant human granulocyte-macrophage colony stimulating factor in transgenic cereal crops
INVENTOR(S): Altosaar, Illimar; **Sardana, Ravinder**; Dudani, Anil; Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005050602	A1	20050303	US 2003-723083		20031126
PRIORITY APPLN. INFO.:			CA 2002-2410702	A	20021126

=> d l21 4 ibib

L21 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:730085 CAPLUS
DOCUMENT NUMBER: 138:164311
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR(S): **Sardana, Ravinder K.**; Alli, Zaman; Dudani, Anil; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; Altosaar, Illimar
CORPORATE SOURCE: Faculty of Medicine, Microbiology and Immunology, Department of Biochemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Transgenic Research (2002), 11(5), 521-531
CODEN: TRSEES; ISSN: 0962-8819
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l21 5 ibib

L21 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:218988 CAPLUS

DOCUMENT NUMBER: 128:256401
TITLE: Synthesis of recombinant human cytosine **GM-CSF** in the seeds of transgenic tobacco plants
AUTHOR(S): **Sardana, Ravinder K.**; Ganz, Peter R.; Dudani, Anil; Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Department of Biochemistry, University of Ottawa, ON, Can.
SOURCE: Methods in Biotechnology (1998), 3(Recombinant Proteins from Plants), 77-87
CODEN: MEBIFQ
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l21 6 ibib

L21 ANSWER 6 OF 7 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2003:19386 CABA
DOCUMENT NUMBER: 20023171035
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR: **Sardana, R. K.**; Alli, Z.; Dudani, A.; Tackaberry, E.; Panahi, M.; Narayanan, M.; Ganz, P.; Altosaar, I.
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, Ontario, K1N 6N5, Canada. altosaar@uottawa.ca
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Publisher: Kluwer Academic Publishers. Dordrecht
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PUB. COUNTRY: Netherlands Antilles
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20030214
Last Updated on STN: 20030214

=> d l21 7 ibib

L21 ANSWER 7 OF 7 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in transgenic plants: the cytokine **GM-CSF** as a model protein
AUTHOR: Ganz, P. R.; Dudani, A. K.; Tackaberry, E. S.; **Sardana, R.**; Sauder, C.; Cheng XiongYing; Altosaar, I.; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
CORPORATE SOURCE: Drugs Directorate, Health Canada, Ottawa, Canada.
SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
Publisher: John Wiley & Sons Ltd. Chichester
ISBN: 0-471-96444-1
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article

LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> d l21 8 ibib
7 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
ENTER ANSWER NUMBER OR RANGE (1):7

L21 ANSWER 7 OF 7 CABA COPYRIGHT 2005 CABI on STN
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AUTHOR: Ganz, P. R.; Dudani, A. K.; Tackaberry, E. S.; **Sardana, R.**; Sauder, C.; Cheng XiongYing; Altosaar, I.; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
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PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> s Dudani, A?/au
L22 206 DUDANI, A?/AU

=> s GM-CSF
L23 35233 GM-CSF

=> s l22 and l23
L24 7 L22 AND L23

=> d l24 1 ibib

L24 ANSWER 1 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:23292 BIOSIS
DOCUMENT NUMBER: PREV200300023292
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide.
AUTHOR(S): Sardana, Ravinder K.; Alli, Zaman; **Dudani, Anil**; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; Altosaar, Illimar [Reprint Author]
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, ON, K1N 6N5, Canada
altosaar@uottawa.ca
SOURCE: Transgenic Research, (October 2002) Vol. 11, No. 5, pp. 521-531. print.
ISSN: 0962-8819 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Jan 2003

Last Updated on STN: 1 Jan 2003

=> d l24 2 ibib

L24 ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1998:236789 BIOSIS
DOCUMENT NUMBER: PREV199800236789
TITLE: Synthesis of recombinant human cytokine **GM-CSF** in the seeds of transgenic tobacco plants.
AUTHOR(S): Sardana, Ravinder K.; Ganz, Peter R.; **Dudani, Anil**; Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Dep. Biochem., Univ. Ottawa, Ottawa, ON, Canada
SOURCE: Cunningham, C. [Editor]; Porter, A. J. R. [Editor]. (1998) pp. 77-87. Methods in Biotechnology; Recombinant proteins form plants: Production and isolation of clinically useful compounds. print.
Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA. Series: Methods in Biotechnology.
ISBN: 0-89603-390-2.
DOCUMENT TYPE: Book
Book; (Book Chapter)
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Jun 1998
Last Updated on STN: 4 Jun 1998

=> d l24 3 ibib

L24 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:185497 CAPLUS
DOCUMENT NUMBER: 142:275034
TITLE: Methods for synthesis of recombinant human granulocyte-macrophage colony stimulating factor in transgenic cereal crops
INVENTOR(S): Altosaar, Illimar; Sardana, Ravinder; **Dudani, Anil**; Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005050602	A1	20050303	US 2003-723083		20031126
PRIORITY APPLN. INFO.:			CA 2002-2410702	A	20021126

=> d l24 4 ibib

L24 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:730085 CAPLUS
DOCUMENT NUMBER: 138:164311
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR(S): Sardana, Ravinder K.; Alli, Zaman; **Dudani, Anil**; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; Ganz, Peter; Altosaar,

Illimar
CORPORATE SOURCE: Faculty of Medicine, Microbiology and Immunology, Department of Biochemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Transgenic Research (2002), 11(5), 521-531
CODEN: TRSEES; ISSN: 0962-8819
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 124 5 ibib

L24 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:218988 CAPLUS
DOCUMENT NUMBER: 128:256401
TITLE: Synthesis of recombinant human cytosine **GM-CSF** in the seeds of transgenic tobacco plants
AUTHOR(S): Sardana, Ravinder K.; Ganz, Peter R.; **Dudani, Anil**; Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Department of Biochemistry, University of Ottawa, ON, Can.
SOURCE: Methods in Biotechnology (1998), 3(Recombinant Proteins from Plants), 77-87
CODEN: MEBIFQ
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 124 6 ibib

L24 ANSWER 6 OF 7 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2003:19386 CABA
DOCUMENT NUMBER: 20023171035
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR: Sardana, R. K.; Alli, Z.; **Dudani, A.**; Tackaberry, E.; Panahi, M.; Narayanan, M.; Ganz, P.; Altosaar, I.
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, Ontario, K1N 6N5, Canada. altosaar@uottawa.ca
SOURCE: Transgenic Research, (2002) Vol. 11, No. 5, pp. 521-531. many ref.
Publisher: Kluwer Academic Publishers. Dordrecht
ISSN: 0962-8819
PUB. COUNTRY: Netherlands Antilles
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20030214
Last Updated on STN: 20030214

=> d 124 7 ibib

L24 ANSWER 7 OF 7 CABA COPYRIGHT 2005 CABI on STN

ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in transgenic plants: the cytokine **GM-CSF** as a model protein
AUTHOR: Ganz, P. R.; **Dudani, A. K.**; Tackaberry, E. S.; Sardana, R.; Sauder, C.; Cheng XiongYing; Altosaar, I.; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
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SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
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DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> s Ganz, P?/au
L25 932 GANZ, P?/AU

=> s GM-CSF
L26 35233 GM-CSF

=> s l25 and l26
L27 10 L25 AND L26

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DUPLICATE PREFERENCE IS 'BIOSIS, CAPLUS, CABA, EMBASE'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L27
L28 6 DUPLICATE REMOVE L27 (4 DUPLICATES REMOVED)

=> d l28 1 ibib

L28 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:185497 CAPLUS
DOCUMENT NUMBER: 142:275034
TITLE: Methods for synthesis of recombinant human granulocyte-macrophage colony stimulating factor in transgenic cereal crops
INVENTOR(S): Altosaar, Illimar; Sardana, Ravinder; Dudani, Anil; **Ganz, Peter**; Tackaberry, Eilleen
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005050602	A1	20050303	US 2003-723083		20031126
PRIORITY APPLN. INFO.:			CA 2002-2410702	A	20021126

=> d l28 2 ibib

L28 ANSWER 2 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 1
ACCESSION NUMBER: 2003:23292 BIOSIS
DOCUMENT NUMBER: PREV200300023292
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide.
AUTHOR(S): Sardana, Ravinder K.; Alli, Zaman; Dudani, Anil; Tackaberry, Eilleen; Panahi, Mitra; Narayanan, Muthukrishnan; **Ganz, Peter**; Altosaar, Illimar [Reprint Author]
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, ON, K1N 6N5, Canada altosaar@uottawa.ca
SOURCE: Transgenic Research, (October 2002) Vol. 11, No. 5, pp. 521-531. print.
ISSN: 0962-8819 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Jan 2003
Last Updated on STN: 1 Jan 2003

=> d l28 3 ibib

L28 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1998:236789 BIOSIS
DOCUMENT NUMBER: PREV199800236789
TITLE: Synthesis of recombinant human cytokine **GM-CSF** in the seeds of transgenic tobacco plants.
AUTHOR(S): Sardana, Ravinder K.; **Ganz, Peter R.**; Dudani, Anil; Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Dep. Biochem., Univ. Ottawa, Ottawa, ON, Canada
SOURCE: Cunningham, C. [Editor]; Porter, A. J. R. [Editor]. (1998) pp. 77-87. Methods in Biotechnology; Recombinant proteins form plants: Production and isolation of clinically useful compounds. print.
Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA. Series: Methods in Biotechnology.
ISBN: 0-89603-390-2.
DOCUMENT TYPE: Book
Book; (Book Chapter)
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Jun 1998
Last Updated on STN: 4 Jun 1998

=> d l28 4 ibib

L28 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:218988 CAPLUS
DOCUMENT NUMBER: 128:256401
TITLE: Synthesis of recombinant human cytosine **GM-CSF** in the seeds of transgenic tobacco plants
AUTHOR(S): Sardana, Ravinder K.; **Ganz, Peter R.**; Dudani, Anil; Tackaberry, Eilleen S.; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Department of Biochemistry, University of Ottawa, ON, Can.
SOURCE: Methods in Biotechnology (1998), 3(Recombinant Proteins from Plants), 77-87

CODEN: MEBIFQ
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l28 5 ibib

L28 ANSWER 5 OF 6 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in transgenic plants: the cytokine **GM-CSF** as a model protein
AUTHOR: **Ganz, P. R.**; Dudani, A. K.; Tackaberry, E. S.; Sardana, R.; Sauder, C.; Cheng XiongYing; Altosaar, I.; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
CORPORATE SOURCE: Drugs Directorate, Health Canada, Ottawa, Canada.
SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
Publisher: John Wiley & Sons Ltd. Chichester
ISBN: 0-471-96444-1
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> d l28 6 ibib

L28 ANSWER 6 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 2
ACCESSION NUMBER: 1993:204406 BIOSIS
DOCUMENT NUMBER: PREV199395105631
TITLE: Platelet-activating factor secreted by DDAVP-treated monocytes mediates von Willebrand factor release from endothelial cells.
AUTHOR(S): Hashemi, S. [Reprint author]; Palmer, D. S.; Aye, M. T.; **Ganz, P. R.**
CORPORATE SOURCE: Ottawa Cent., Can. Red Cross, Blood Transfusion Serv., Ottawa, Ontario, Can. K1S 3E2, canada
SOURCE: Journal of Cellular Physiology, (1993) Vol. 154, No. 3, pp. 496-505.
CODEN: JCLLAX. ISSN: 0021-9541.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Apr 1993
Last Updated on STN: 24 Apr 1993

=> s Tackaberry, E?/au
L29 87 TACKABERRY, E?/AU

=> s GM-CSF
L30 35233 GM-CSF

=> s l29 and l30
L31 7 L29 AND L30

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DUPLICATE PREFERENCE IS 'BIOSIS, CAPLUS, CABA'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L31
L32           5 DUPLICATE REMOVE L31 (2 DUPLICATES REMOVED)

=> d l32 1 ibib

L32  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:185497  CAPLUS
DOCUMENT NUMBER:          142:275034
TITLE:                    Methods for synthesis of recombinant human
                          granulocyte-macrophage colony stimulating factor in
                          transgenic cereal crops
INVENTOR(S):              Altosaar, Illimar; Sardana, Ravinder; Dudani, Anil;
                          Ganz, Peter; Tackaberry, Eilleen
PATENT ASSIGNEE(S):       Can.
SOURCE:                   U.S. Pat. Appl. Publ., 23 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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     US 2005050602         A1    20050303    US 2003-723083           20031126
PRIORITY APPLN. INFO.:                       CA 2002-2410702      A   20021126


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L32  ANSWER 2 OF 5  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
     DUPLICATE 1
ACCESSION NUMBER:    2003:23292  BIOSIS
DOCUMENT NUMBER:     PREV200300023292
TITLE:               Biological activity of human granulocyte-macrophage colony
                     stimulating factor is maintained in a fusion with seed
                     glutelin peptide.
AUTHOR(S):           Sardana, Ravinder K.; Alli, Zaman; Dudani, Anil;
                     Tackaberry, Eilleen; Panahi, Mitra; Narayanan,
                     Muthukrishnan; Ganz, Peter; Altosaar, Illimar [Reprint
                     Author]
CORPORATE SOURCE:    Department of Biochemistry, Microbiology and Immunology,
                     Faculty of Medicine, University of Ottawa, 40 Marie Curie,
                     Ottawa, ON, K1N 6N5, Canada
                     altosaar@uottawa.ca
SOURCE:              Transgenic Research, (October 2002) Vol. 11, No. 5, pp.
                     521-531. print.
                     ISSN: 0962-8819 (ISSN print).
DOCUMENT TYPE:       Article
LANGUAGE:            English
ENTRY DATE:          Entered STN: 1 Jan 2003
                     Last Updated on STN: 1 Jan 2003


=> d l32 3 ibib

L32  ANSWER 3 OF 5  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
ACCESSION NUMBER:    1998:236789  BIOSIS
DOCUMENT NUMBER:     PREV199800236789
TITLE:               Synthesis of recombinant human cytokine GM-
                     CSF in the seeds of transgenic tobacco plants.
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AUTHOR(S): Sardana, Ravinder K.; Ganz, Peter R.; Dudani, Anil; **Tackaberry, Eilleen S.**; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Dep. Biochem., Univ. Ottawa, Ottawa, ON, Canada
SOURCE: Cunningham, C. [Editor]; Porter, A. J. R. [Editor]. (1998) pp. 77-87. Methods in Biotechnology; Recombinant proteins form plants: Production and isolation of clinically useful compounds. print.
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Book; (Book Chapter)
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Jun 1998
Last Updated on STN: 4 Jun 1998

=> d l32 4 ibib

L32 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:218988 CAPLUS
DOCUMENT NUMBER: 128:256401
TITLE: Synthesis of recombinant human cytosine **GM-CSF** in the seeds of transgenic tobacco plants
AUTHOR(S): Sardana, Ravinder K.; Ganz, Peter R.; Dudani, Anil; **Tackaberry, Eilleen S.**; Cheng, Xiongying; Altosaar, Illimar
CORPORATE SOURCE: Department of Biochemistry, University of Ottawa, ON, Can.
SOURCE: Methods in Biotechnology (1998), 3(Recombinant Proteins from Plants), 77-87
CODEN: MEBIFQ
PUBLISHER: Humana Press Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l32 5 ibib

L32 ANSWER 5 OF 5 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in transgenic plants: the cytokine **GM-CSF** as a model protein
AUTHOR: Ganz, P. R.; Dudani, A. K.; **Tackaberry, E. S.**; Sardana, R.; Sauder, C.; Cheng XiongYing; Altosaar, I.; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
CORPORATE SOURCE: Drugs Directorate, Health Canada, Ottawa, Canada.
SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
Publisher: John Wiley & Sons Ltd. Chichester
ISBN: 0-471-96444-1
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

```
=> s (transformed or transgenic) (w) plant
L33      50961 (TRANSFORMED OR TRANSGENIC) (W) PLANT

=> s GM-CSF
L34      35233 GM-CSF

=> s optimized (w) codon
L35         86 OPTIMIZED (W) CODON

=> s l33 and l34 and l35
L36          0 L33 AND L34 AND L35

=> s l34 and l35
L37          3 L34 AND L35

=> duplicate remove
ENTER L# LIST OR (END):l37
DUPLICATE PREFERENCE IS 'BIOSIS, CAPLUS, EMBASE'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L37
L38           1 DUPLICATE REMOVE L37 (2 DUPLICATES REMOVED)

=> d l38 1 ibib
```

Last Updated on STN: 19951115

```
=> s GM-CSF
L10      35233 GM-CSF

=> s plant
L11    5779251 PLANT

=> s l10 and l11
L12        414 L10 AND L11

=> s (transgenic or transformed) (w) plants
L13      46971 (TRANSGENIC OR TRANSFORMED) (W) PLANTS

=> s l10 and l13
L14         13 L10 AND L13

=> duplicate remove
ENTER L# LIST OR (END):l14
DUPLICATE PREFERENCE IS 'AGRICOLA, CAPLUS, CABA'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L14
L15          12 DUPLICATE REMOVE L14 (1 DUPLICATE REMOVED)

=> d l15 1 ibib

L15  ANSWER 1 OF 12  AGRICOLA  Compiled and distributed by the National
     Agricultural Library of the Department of Agriculture of the United States
     of America.  It contains copyrighted materials.  All rights reserved.
     (2005) on STN                                          DUPLICATE 1
ACCESSION NUMBER:        2004:21009  AGRICOLA
DOCUMENT NUMBER:         IND43625311
TITLE:                   Direct transfer and expression of human GM-
                         CSF in tobacco suspension cell using
                         Agrobacterium-mediated transfer system.
AUTHOR(S):               Kim, Y.S.; Kwon, T.H.; Sik, Y.M.
AVAILABILITY:            DNAL (QK725.P53)
SOURCE:                  Plant cell, tissue and organ culture, 2004 Aug. Vol.
                         78, no. 2 p. 133-138
                         ISSN: 0167-6857
NOTE:                    Includes references
DOCUMENT TYPE:           Article
FILE SEGMENT:            Non-US
LANGUAGE:                English


=> d l15 2 ibib

L15  ANSWER 2 OF 12  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2003:551249  CAPLUS
DOCUMENT NUMBER:         139:112732
TITLE:                   Transgnic plants expressing cytokines and autoantigens
                         and uses for treating inflammatory diseases
INVENTOR(S):             Brandle, Jim; Ma, Shengwu; Menassa, Rima; Jevnikar,
                         Anthony; Delovitch, Terry
PATENT ASSIGNEE(S):      The Minister of Agriculture & Agri-Food Canada, London
                         Health Sciences Center, Can.
SOURCE:                  U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S.
                         Ser. No. 773,385.
                         CODEN: USXXCO
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  2
```

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003135887	A1	20030717	US 2002-137647	20020503
US 2002038470	A1	20020328	US 2001-773385	20010201
EP 1359220	A2	20031105	EP 2002-257531	20021030
EP 1359220	A3	20031210		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CA 2427574	AA	20031103	CA 2003-2427574	20030505

PRIORITY APPLN. INFO.:

US 1996-733791	B2	19961018
US 1998-102050	B1	19980622
US 2001-773385	A2	20010201
US 2002-137647	A	20020503
EP 2002-257531	A	20021030

=> d l15 3 ibib

L15 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:832739 CAPLUS
DOCUMENT NUMBER: 141:18135
TITLE: Expression of recombinant cytokines in **transgenic plants** and their uses
AUTHOR(S): Matsumura, Takeshi
CORPORATE SOURCE: Institute for Biological Resources and Functions, National Institute of Advanced Industrial Science and Technology, Japan
SOURCE: Biobencha (2003), 3(5), 29-31
CODEN: BIOBC8; ISSN: 1346-5376
PUBLISHER: Yodosha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

=> d l15 4 ibib

L15 ANSWER 4 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2002:160621 CABA
DOCUMENT NUMBER: 20023092021
TITLE: Effects of osmotic pressure on production of recombinant human granulocyte-macrophage colony stimulating factor in plant cell suspension culture
Special issue: Applied biotechnology in Asia
AUTHOR: Lee JaeHwa; Kim NanSun; Kwon TaeHo; Yang MoonSik; Lee, J. H.; Kim, N. S.; Kwon, T. H.; Yang, M. S.
CORPORATE SOURCE: Division of Biological Sciences, Basic Science Research Institute, Dukjindong 664-14, Chonju, Chonbuk 561-756, Korea Republic.
mskyang@moak.chonbuk.ac.kr
SOURCE: Enzyme and Microbial Technology, (2002) Vol. 30, No. 6, pp. 768-773. 22 ref.
Publisher: Elsevier Science Inc. New York
ISSN: 0141-0229
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20021004
Last Updated on STN: 20021004

=> d l15 5 ibib

L15 ANSWER 5 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2003:19386 CABA
DOCUMENT NUMBER: 20023171035
TITLE: Biological activity of human granulocyte-macrophage colony stimulating factor is maintained in a fusion with seed glutelin peptide
AUTHOR: Sardana, R. K.; Alli, Z.; Dudani, A.; Tackaberry, E.; Panahi, M.; Narayanan, M.; Ganz, P.; Altosaar, I.
CORPORATE SOURCE: Department of Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa, 40 Marie Curie, Ottawa, Ontario, K1N 6N5, Canada. altosaar@uottawa.ca
SOURCE: Transgenic Research, (2002) Vol. 11, No. 5, pp. 521-531. many ref.
Publisher: Kluwer Academic Publishers. Dordrecht
ISSN: 0962-8819
PUB. COUNTRY: Netherlands Antilles
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20030214
Last Updated on STN: 20030214

=> d l15 6 ibib

L15 ANSWER 6 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2002:160859 CABA
DOCUMENT NUMBER: 20023093713
TITLE: Increased production of human granulocyte-macrophage colony stimulating factor (hGM-CSF) by the addition of stabilizing polymer in plant suspension cultures
AUTHOR: Lee JaeHwa; Kim NanSun; Kwon TaeHo; Jang YongSuk; Yang MoonSik; Lee, J. H.; Kim, N. S.; Kwon, T. H.; Jang, Y. S.; Yang, M. S.
CORPORATE SOURCE: Basic Science Research Institute, Chonbuk National University, Dukjindong 664-14, Chonju, Chonbuk 561-756, Korea Republic. mskyang@moak.chonbuk.ac.kr
SOURCE: Journal of Biotechnology, (2002) Vol. 96, No. 3, pp. 205-211. 19 ref.
Publisher: Elsevier Science Ltd. Oxford
ISSN: 0168-1656
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20021004
Last Updated on STN: 20021004

=> d l15 7 ibib

L15 ANSWER 7 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2003:23562 CABA
DOCUMENT NUMBER: 20023186189
TITLE: Increased production and recovery of secreted foreign proteins from plant cell cultures using an affinity chromatography bioreactor
AUTHOR: James, E.; Mills, D. R.; Lee, J. M.
CORPORATE SOURCE: Department of Chemical Engineering, Washington State University, Pullman, WA 99163-2710, USA. jmlee@mail.wsu.edu
SOURCE: Biochemical Engineering Journal, (2002) Vol. 12, No. 3, pp. 205-213.
Publisher: Elsevier Science B.V. Amsterdam

ISSN: 1369-703x
URL: http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V5N-4625TNG-3&_user=10&_coverDate=12%2F31%2F2002&_rdoc=5&_fmt=summary&_orig=browse&_srch=%23toc%235791%232002%23999879996%23366427!&_cdi=5791&_sort=d&_docanchor=&wchp=dGLbVzz-lSzBS&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=e1821e50c0c8961125f05bb21e44eb4e
DOI: 10.1016/S1369-703X(02)00073-6
PUB. COUNTRY: Netherlands Antilles
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20030214
Last Updated on STN: 20030214

=> d l15 7 abs

L15 ANSWER 7 OF 12 CABA COPYRIGHT 2005 CABI on STN
AB Although plant cell cultures can be used to produce a variety of proteins, the instability and degradation of secreted proteins hinders product recovery from culture medium. To solve this problem, an affinity chromatography bioreactor (ACBR) scheme was developed for the simultaneous production and purification of foreign proteins from genetically modified plant suspension cultures. Two model products, the heavy chain of a mouse monoclonal antibody (HC MAb) and 6-his tagged human granulocyte macrophage colony-stimulating factor (**GM-CSF**), were produced in a modified shake flask and separated using protein G and iminodiacetic acid metal affinity resins, respectively. Results showed that the ACBR scheme increased the production of HC MAb by as much as eight-fold and **GM-CSF** by more than two-fold compared with batch yields. Product recovery was optimized by varying the aeration method, flow rate, pH, and resin type for the experimental system. These results suggest that in situ protein removal from plant cell media using the ACBR strategy can isolate the product from degrading influences and remove the protein from product inhibition pathways.

=> d l15 8 ibib

L15 ANSWER 8 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2002:26085 CABA
DOCUMENT NUMBER: 20013139787
TITLE: The effect of immobilization on recombinant protein production in plant cell culture
AUTHOR: Bodeutsch, T.; James, E. A.; Lee, J. M.
CORPORATE SOURCE: Department of Chemical Engineering, Washington State University, Pullman, WA 99164-2710, USA.
SOURCE: Plant Cell Reports, (2001) Vol. 20, No. 6, pp. 562-566. 19 ref.
Publisher: Springer-Verlag. Berlin
ISSN: 0721-7714
DOI: 10.1007/s002990100354
PUB. COUNTRY: Germany, Federal Republic of
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20020207
Last Updated on STN: 20020207

=> d l15 8 abs

L15 ANSWER 8 OF 12 CABA COPYRIGHT 2005 CABI on STN
AB The effects of encapsulation on the production of recombinant human

proteins by transgenic Nicotiana tabacum cells were investigated using alginate, carrageenan, and agar as immobilization matrices. Experiments showed that cell encapsulation in alginate increase the production of human granulocyte-macrophage colony-stimulating factor (**GM-CSF**) in tobacco cells by approximately 50%. Alginate also yielded the highest quality beads and the most reproducible growth results. The most likely cause for this increased protein production is the altered growth conditions within the alginate beads resulting in a prolonged exponential growth phase. To characterize these effects, we compared growth performance and protein production for various gel geometries, bead sizes, and volume fractions of beads.

=> d l15 9 ibib

L15 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:819497 CAPLUS
DOCUMENT NUMBER: 132:60143
TITLE: Cryptic regulatory elements obtained from plants for seed specific expression in both dicots and monocots
INVENTOR(S): Miki, Brian; Ouellet, Therese; Hattori, Jiro; Foster, Elizabeth; Labbe, Helene; Martin-heller, Teresa; Tian, Lining; Brown, Daniel Charles William; Zhang, Peijun; Wu, Keqiang
PATENT ASSIGNEE(S): Her Majesty the Queen In Right of Canada as Represented by the Minister of Agriculture and Agri-Food, Can.; et al.
SOURCE: PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967389	A2	19991229	WO 1999-CA578	19990622
WO 9967389	A3	20000309		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 5824863	A	19981020	US 1995-441597	19950515
CA 2246892	AA	19991222	CA 1998-2246892	19980909
CA 2331842	AA	19991229	CA 1999-2331842	19990622
AU 9943551	A1	20000110	AU 1999-43551	19990622
EP 1088073	A2	20010404	EP 1999-926205	19990622
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 2001047091	A1	20011129	US 2000-747368	20001222
US 2004073022	A1	20040415	US 2003-437261	20030513
US 2005055742	A1	20050310	US 2004-866529	20040610

PRIORITY APPLN. INFO.:		
US 1995-441597	A2	19950515
US 1998-102312	A	19980622
CA 1998-2246892	A	19980909
CA 1995-2149000	A	19950509
US 1996-593121	A1	19960201
US 1998-174999	B2	19981019
WO 1999-CA578	W	19990622

US 1999-457123 A1 19991207
US 2000-747368 A1 20001222

=> d l15 10 ibib

L15 ANSWER 10 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 1998:54322 CABA
DOCUMENT NUMBER: 19981602409
TITLE: Expression of human blood proteins in **transgenic plants**: the cytokine **GM-CSF** as a model protein
AUTHOR: Ganz, P. R.; Dudani, A. K.; Tackaberry, E. S.; Sardana, R.; Sauder, C.; Cheng XiongYing; Altosaar, I.; Cheng, X. Y.; Owen, M. R. L. [EDITOR]; Pen, J. [EDITOR]
CORPORATE SOURCE: Drugs Directorate, Health Canada, Ottawa, Canada.
SOURCE: Transgenic plants: a production system for industrial and pharmaceutical proteins, (1996) pp. 281-297. 53 ref.
Publisher: John Wiley & Sons Ltd. Chichester
ISBN: 0-471-96444-1
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book; Book Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19980407
Last Updated on STN: 19980407

=> d l15 11 ibib

L15 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:705506 CAPLUS
DOCUMENT NUMBER: 123:76437
TITLE: Manufacture of foreign proteins in plants as components of a viral polyprotein with release of the protein through normal polyprotein processing
INVENTOR(S): Carrington, James C.; Dolja, Valerian V.
PATENT ASSIGNEE(S): Texas A and M University, USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9512669	A1	19950511	WO 1994-US12836	19941101
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5491076	A	19960213	US 1993-146881	19931101
ZA 9408561	A	19950630	ZA 1994-8561	19941031
AU 9514080	A1	19950523	AU 1995-14080	19941101
PRIORITY APPLN. INFO.:			US 1993-146881 A	19931101
			WO 1994-US12836 W	19941101

=> d l15 10 abs

L15 ANSWER 10 OF 12 CABA COPYRIGHT 2005 CABI on STN
AB The production of human growth factors in **transgenic plants** is reviewed, focusing on expression of the cytokine **GM-CSF** (granulocyte-macrophage colony stimulating

factor) in genetically engineered tobacco.

=> d l15 11 abs

L15 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
AB A method of manufacturing foreign proteins in plants that makes use of the polyprotein processing machinery of plant viruses is described. A sequence encoding the protein of interest is incorporated into the polyprotein gene of a plant virus and introduced into plant cells. The protein is then released as a result of the normal processing of the polyprotein. The virus may be a potyvirus, a nepovirus or a comovirus with tobacco etch potyvirus (TEV) being particularly preferred. The proteins involved may affect resistance to pests or agronomic traits such as stress resistance, and crop yield or quality or they may be for pharmaceutical use. Tests using a reporter gene (for β-glucuronidase) showed that a replication-competent TEV vector permitted efficient systemic spread of the gene with the capacity for a large foreign insert. Spontaneous mutants indicated that the HC-Pro region was not essential for replication of the virus or intraplant movement, but that it played a role in interplant movement.

=> d l15 12 ibib

L15 ANSWER 12 OF 12 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 95:197929 CABA
DOCUMENT NUMBER: 19951612170
TITLE: Harvesting blood proteins from grain
AUTHOR: Robinson, A.
SOURCE: Canadian Medical Association Journal, (1995) Vol. 153, No. 4, pp. 427-429. 6 ref.
ISSN: 0820-3946
DOCUMENT TYPE: Journal
LANGUAGE: English
SUMMARY LANGUAGE: French
ENTRY DATE: Entered STN: 19951115
Last Updated on STN: 19951115